COURSE OUTLINE

(1) GENERAL

SCHOOL	MEDICINE
ACADEMIC UNIT	NEUROSCIENCE GRADUATE PROGRAM
LEVEL OF STUDIES	GRADUATE
COURSE CODE	NEURO 221 SEMESTER 2ND SEMESTER
COURSE TITLE	NEURAL BASIS OF BEHAVIOR

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	WEEKLY TEACHING HOURS	CREDITS
LECTURES	2HRS/WEEK FOR 10 WEEKS	4
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	SPECIALIZED GENERAL KNOWLEDGE, SKILLS DEVELOPMENT, ELECTIVE
PREREQUISITE COURSES:	NONE
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	ENGLISH
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES
COURSE WEBSITE (URL)	ELEARN PLATFORM

(2) LEARNING OUTCOMES

Learning outcomes
The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.   *Consult Appendix A*   • *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*   • *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*   • *Guidelines for writing Learning Outcomes*
This course aims to engage students to general and specialized knowledge of the behavioral neuroscience. Specifically, students will   • Learn the current state-of-the-art knowledge on the neural basis of different behaviors, including maternal behavior, aggression and decision-making among others.   • Become familiarized with a significant portion of the scientific literature in the field of behavioral neuroscience   • Improve their critical reading skills of a scientific article   • be trained in searching for scientific literature on a specific subject   • gain experience in critically analyzing a primary research article related to the topics covered in the course and developing a research proposal in behavioral neuroscience
General Competences
Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma

- Search for analysis and synthesis of data and information
- Working in an international environment
- Working independently
- Project planning and management
- Showing social, professional and ethical responsibility and sensitivity to gender issues
- Production of free, creative and inductive thinking
- Working in an interdisciplinary environment
- Team work

(3) SYLLABUS

1) Neural basis of drug addiction I – G. Panagis (27-5-2026, 12:00-14:00)

2) Neural basis of drug addiction II – G. Panagis (3-6-2026, 12:00-14:00)

3) Neural basis of drug addiction III G. Panagis (4-6-2026, 13:00-15:00)

4) Neural basis of feeding behavior A. Kastellakis (5-6-2026, 13:00-15:00)

5) Neural basis of sexual behavior A. Kastellakis (9-6-2026, 13:00-15:00)

6) Neural basis of sleep A. Kastellakis (11-6-2026, 11:00-13:00)

7) Neural basis of decision-making, K. Sidiropoulou, (12-6-2026, 13:00-15:00)

8) Neural basis of resilience S. Mastrotheodoros (17-6-2026, 11:00-13:00)

9) Neural basis of anxiety, A. Velli, (18-6-2026, 13:00-15:00)

10) Behavioral phenotyping of animal models of neurodegenerative disorders, A. Velli (19-6-2026, 13:00-15:00)

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face in the classroom
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Use of the e-learn platform

TEACHING METHODS

The manner and methods of teaching are described in detail.
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.

The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS

Activity	Semester workload
Lectures	20
Independent study	40 (for each lecture, 4 hours of study/preparation are required)
Paper on subject provided by the professors of the course	40 (for each student)
Course total	*100*

STUDENT PERFORMANCE EVALUATION

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

Written assignment: critical analysis of a research article and development of a research proposal.

Student evaluation is performed in the English language.

The evaluate procedure will be announced in the 1st day of class and will be uploaded in the e-learn platform

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography: Peer-reviewed scientific articles from credible scientific journals (for ex. Journal of Neuroscience, Cerebral Cortex, Nature, Science, Nature Neuroscience, Journal of Neurophysiology, Cell, Neuron, Neuropsychopharmacology and other neuroscience journals